

Title (en)

LIGHT TRAPPING DYNAMIC PHOTOVOLTAIC MODULE

Title (de)

LICHTEINFANGENDES DYNAMISCHES PHOTOVOLTAISCHES MODUL

Title (fr)

MODULE PHOTOVOLTAÏQUE DYNAMIQUE À PIÉGEAGE DE LUMIÈRE

Publication

EP 4073851 A1 20221019 (EN)

Application

EP 20899615 A 20201112

Priority

- AE 600176619 A 20191212
- US 202017094231 A 20201110
- IB 2020060636 W 20201112

Abstract (en)

[origin: US2021184063A1] There is provided a light trapping dynamic photovoltaic module having a module surface configured to be exposed to solar rays, including a plurality of photovoltaic cell stacks configured adjacent to each other throughout the module surface, wherein each photovoltaic cell stack comprises a plurality of photovoltaic cells. Further, a plurality of reflective strips are placed in between each of the photovoltaic cell stacks for continuously reflecting incident solar rays from one reflective strip to another until absorbed by a photovoltaic cell among said plurality of photovoltaic cells, wherein the incident solar rays are continuously reflected through a mirror phenomenon, wherein the incident solar rays are additionally reflected by front and back panels of the dynamic photovoltaic module, thereby trapping incident solar rays within boundaries of the dynamic photovoltaic module for conversion into electrical energy. Also disclosed is a method of manufacturing the light trapping photovoltaic module.

IPC 8 full level

H01L 31/054 (2014.01); **H01L 31/043** (2014.01)

CPC (source: EP US)

H01L 25/043 (2013.01 - EP); **H01L 31/043** (2014.12 - EP); **H01L 31/0443** (2014.12 - US); **H01L 31/048** (2013.01 - EP US); **H01L 31/05** (2013.01 - EP); **H01L 31/0504** (2013.01 - US); **H01L 31/0547** (2014.12 - EP US); **H01L 31/18** (2013.01 - US); **H02S 40/22** (2014.12 - EP); **Y02E 10/52** (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 11545591 B2 20230103; **US 2021184063 A1 20210617**; CN 114946040 A 20220826; EP 4073851 A1 20221019; EP 4073851 A4 20240103; WO 2021116794 A1 20210617

DOCDB simple family (application)

US 202017094231 A 20201110; CN 202080092897 A 20201112; EP 20899615 A 20201112; IB 2020060636 W 20201112